

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FLORIAN BRABETZ, PETER GEISSLINGER,
and GERD KLIMM

Appeal No. 2004-0413
Application No. 09/752,301

ON BRIEF

Before COHEN, ABRAMS, and STAAB, Administrative Patent Judges.
STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1-8, all the claims currently pending in the application.

Appellants' invention pertains to a motorized wheelbarrow having a wheelbarrow wheel including an electric hub motor for driving the wheelbarrow wheel. A further understanding of the invention can be derived from a reading of claim 1, the sole

Appeal No. 2004-0413
Application No. 09/752,301

independent claim on appeal, which appears in the appendix to appellants' main brief.

The references applied by the examiner in the final rejection are:¹

Mager	3,792,742	Feb. 19, 1974
Miner	3,797,600	Mar. 19, 1974
Yuki et al.	6,065,555	May 23, 2000

Claims 1, 2 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yuki in view of Mager.

Claims 3 and 5-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yuki in view of Mager and further in view of Miner.

¹On page 7 of the answer, the examiner has mentioned US patent 5,633,544 to Toida which purportedly "suggests the desirability of replacing a wheel driven by an external motor with a wheel in which the motor is contained within the wheel hub itself" This patent has been given no consideration since it has not been listed among the references relied upon, and since it has not been included in the statement of either of the rejections. *Ex parte Raske*, 28 USPQ2d 1304, 1304-05 (Bd. Pat. App. & Int. 1993). Compare *In re Hoch*, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970), cited in Section 706.02(j), Manual of Patent Examining Procedure ("Where a reference is relied on to support a rejection, whether or not in a 'minor capacity,' there would appear to be no excuse for not positively including the reference in the statement of rejection.").

Reference is made to appellants' main and reply briefs (Paper Nos. 14 and 16) and to the examiner's answer (Paper No. 15) for the respective positions of appellant and the examiner regarding the merits of these rejections.

Discussion

I. Claim Grouping

Appellants' main brief states on page 3 under the heading "Grouping of Claims" that "[t]here is only one group of claims, that is, independent claim 1 and claims 2-8 dependent on claim 1." In addition, appellants have not presented arguments specifically directed to the patentability of dependent claims 2-8 over the applied references², nor have appellants challenged the examiner's statement on page 2 of the answer that claims 1-8 stand or fall together. It follows that in the discussion below, we shall focus upon claim 1 and the arguments directed thereto, with claims 2-8 standing or falling with claim 1.

²Appellants' cursory recitation on pages 8-9 of the main brief of the content of dependent claims 2-8 does not constitute an argument separately arguing the patentability of these claims over the prior art.

II. The Merits of the Rejection

The main issue in the case "is whether the subject matter as defined in claim 1 is obvious in view of Yuki . . . and Mager" (main brief, page 4). More particularly, the main issue for us to decide is whether it would have been obvious in view of the combined teachings of Yuki and Mager to substitute an electric hub motor for the motor drive arrangement of Yuki, such that the modified Yuki wheelbarrow satisfies the limitation of claim 1 that "said wheelbarrow wheel includ[es] an electric hub motor for driving said wheelbarrow wheel."

The examiner has found (answer, page 3-4), and appellants do not dispute, that Yuki discloses a motorized wheelbarrow generally as claimed in claim 1, including a frame 11 having a wheel fork 22, spars 12 having support handles 20, a bucket 27 mounted on the frame, a battery containment 33 for removably receiving a battery 29 for supplying electric power to the motor, and a control switch 56, 73 mounted on one of the handles for controlling the electric power supply from the battery to an electric motor 30. The examiner concedes that the electric motor of Yuki is not an electric hub motor mounted in the wheel. The examiner turns to Mager to remedy this deficiency.

Mager pertains to an electric motor operated vehicle comprising, *inter alia*, four wheels, each wheel having an electric hub motor for directly driving that wheel. As expressly stated by Mager at column 2, lines 50-54, a benefit of this type of drive is that "[b]y mounting the drive motors directly on the traction wheel assemblies, power losses through use of interconnecting drive arrangements are avoided."

Looking at Yuki in more detail, we note that the electric motor 30 is drivingly connected to the wheelbarrow wheel 23 through a power train that includes a number of gears. More particularly, and with reference to Yuki's schematic Figure 4, motor 30 is drivingly connected to wheel axle 24 by a drive train that includes first and second gears 38 and 40, one-way clutch 41, third and fourth gears 42 and 44, fifth and sixth gears 45 and 47, and a sprocket and chain set 48-50. Keeping in mind that the law presumes skill on the part of the artisan rather than the converse (*In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985)), it is our view that one of ordinary skill in the art would have been motivated to substitute a direct drive electric hub motor arrangement like that of Mager for the rather complex and cumbersome drive arrangement of Yuki merely for the purpose of streamlining and simplifying Yuki's wheelbarrow wheel drive

arrangement. In any event, ample suggestion for substituting a direct drive electric hub motor in Yuki for the more complicated drive arrangement thereof is found in Mager's express teaching that a benefit of mounting the drive motor directly on the wheel is to avoid power losses that occur through use of "interconnecting drive arrangements" (Mager, column 2, line 53), which we believe the ordinarily skilled artisan would understand to include more complicated drive trains such as the one employed by Yuki. Thus, we consider that the examiner has presented evidence sufficient to establish a *prima facie* case of obviousness of the subject matter of claim 1.

We have, of course, considered appellants' position as set forth in the main and reply briefs. The argument that the examiner's motivation for combining the references is based on impermissible hindsight is not persuasive given Mager's disclosure at column 2, lines 50-54. Further, the Chicago Sun Times newspaper article cited during prosecution to show "that the inventors' wheelbarrow is a new idea, which the world has been waiting for" and that "the inventors caused some sensation with their wheelbarrow" (main brief, page 6) has been noted, but is given little weight since, among other things, it is not in affidavit or declaration form, is not attributed to any named persons, and is so

Appeal No. 2004-0413
Application No. 09/752,301

general in its description of the motorized wheelbarrow shown in the photo that a reasonable nexus between the pictured wheelbarrow and the claimed subject matter cannot be established. Finally, appellants argue on pages 4-5 of the main brief to the effect that since electric hub motors such as the one shown in Mager have been around for over 20 years, there should be a power wheelbarrow in the art that utilizes such a drive arrangement, if that were obvious. However, the age of the references is not persuasive of nonobviousness absent some showing that the art tried and failed to solve some problem notwithstanding its presumed knowledge of the references. *In re Neal*, 481 F.2d 1346, 1347, 179 USPQ 56, 57 (CCPA 1973).

In light of the above, we shall sustain the standing rejection of claim 1 as being unpatentable over Yuki in view of Mager. We shall also sustain the standing rejection of claims 2-8 under 35 U.S.C. § 103(a) since, as indicated above, these claims stand or fall with claim 1.

The decision of the examiner is affirmed.

Appeal No. 2004-0413
Application No. 09/752,301

No time period for taking any subsequent action in connection
with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
NEAL E. ABRAMS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
LAWRENCE J. STAAB)	
Administrative Patent Judge)	

LJS/lp

Appeal No. 2004-0413
Application No. 09/752,301

KLAUS J. BACH
4407 TWIN OAKS DRIVE
MURRYSVILLE, PA 15668